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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/806,906

03/23/2004

Jonathan J. Langberg

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EXAMINER

SCHILLINGER, ANN M

ART UNIT

PAPER NUMBER

3774

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/806,906	<b>Applicant(s)</b> LANGBERG ET AL.	
	<b>Examiner</b> ANN SCHILLINGER	<b>Art Unit</b> 3774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2010.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>8/17/09, 2/17/10</u> .  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 12, 19, 21-23, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. (US Pat. No. 5,201,880) in view of Diederich et al. (US Pat. No. 6,117,101). Wright et al. teaches transluminally advancing a prosthesis in a first configuration into the coronary sinus and manipulating the prosthesis to a second configuration different from the first configuration to exert a compressive force on the mitral valve in order to eliminate any valve regurgitation (col. 6, lines 6- through col. 7, line 23). The mitral valve's regurgitation is assessed, and the prosthesis may be adjusted accordingly (col. 4, lines 18-21; col. 10, lines 3-50). After measuring, the appropriate size prosthesis may be selected (col. 6, lines 4-11).

Wright et al. does not teach monitoring other hemodynamic functions while the prosthesis is in its second configuration. Diederich et al. teaches monitoring hemodynamic function in col. 19, lines 54 through col. 20, lines 8 for the purpose of assessing the patient's safety through his cardiac operations. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the device of Wright et al. by monitoring a patient's hemodynamic function in order to assess the patient's safety through his cardiac operations.

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Wright et al. further does not teach using a catheter to insert the prosthesis through the femoral vein. Diederich et al. teaches a method of insertion using a catheter (130) through the femoral vein in col. 14, lines 23- 38 and col. 16, lines 31-40 for the purpose of allowing easier access to the mitral valve. Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to insert the device of Wright et al. in a catheter through the femoral vein in order to allow easier access the mitral valve.

Claims 6-11 and 24-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of Wright (US Pat. No. 5,522,884). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do not teach locking the prosthesis in a certain configuration. Wright teaches mitral annuloplasty rings where the rings are held in place by the various means claimed by the Applicant in col. 1, line 40 through col. 3, line 53 for the purpose of affixing the necessary parts of the prosthesis in their appropriate positions. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to modify the device of Wright et al. and Diederich et al. by using locking means in order to affix the necessary parts of the prosthesis in their appropriate positions.

Claims 13 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of Grimes (US Pat. No. 6,312,447). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do not teach using transesophageal echo cardiography to monitor the patient's hemodynamic function. Grimes teaches methods of mitral valve repair that uses transesophageal echo cardiography in column 4 for the purpose of ensuring the device are in their proper locations.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use transesophageal echo cardiography in order to ensure the devices are in their proper positions.

Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of Purdy et al. (US Pat. No. 5,562,729). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do not teach the level of regurgitation achieved by the device. Purdy et al. teaches valve repair that minimizes heart valve regurgitation in col. 12, lines 17-37 for the purpose of improving blood flow.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use the device of Wright et al. and Diederich et al. to achieve at least a one grade reduction in regurgitation in order to improve blood flow.

Claims 14 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of Fowler, Jr. et al. (US Pat. No. 5,086,776). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do not teach using surface echo cardiography to monitor the patient's hemodynamic function. Fowler, Jr. et al. teaches methods of monitoring heart performance using surface echo cardiography in col. 1, lines 10-25 to utilize its noninvasive properties. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use surface echo cardiography in order to utilize its noninvasive properties.

Claims 15 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of Killman (US Pat. No. 5,846,198). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do

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not teach using intracardiac echo cardiography. Killman teaches heart monitoring means including intracardiac echo cardiography in col. 2, line 55 through col. 3, line 2 for the purpose of utilizing the procedure's improved imaging. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use intracardiac echo cardiography in order to improve imaging of the procedure.

Claims 16 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of Mehta (US Pat. No. 5,476,453). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do not teach using fluoroscopy with radiocontrast media. Mehta teaches methods of coronary repair using fluoroscopy with radiocontrast media in col. 1, lines 34-67 for the purpose of utilizing its visual guiding capabilities. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use fluoroscopy with radiocontrast media in order to utilize its visual guiding capabilities.

Claims 17 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of McIntyre (US Pat. No. 5,291,895). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do not teach using wedge pressure measurements to monitor hemodynamic function. McIntyre teaches methods of evaluating heart mechanical performance using wedge pressure measurements to monitor hemodynamic function in col. 15, line 61 through col. 16, line 15 for the purpose of utilizing its noninvasive properties. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use wedge pressure measurements to monitor hemodynamic function in order to utilize its noninvasive properties.

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Claims 18, 36, and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al. in view of Diederich et al. further in view of Kadhiresan (US Pat. No. 5,935,081). Wright et al., as modified by Diederich et al., teaches the invention substantially as claimed, but they do not teach using an ongoing drug therapy. Kadhiresan teaches long-term heart monitoring procedures using an ongoing drug therapy in col. 4, lines 8-46 for the purpose of improving the patients' quality of life. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, to use an ongoing drug therapy in order to improve the patients' quality of life.

#### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANN SCHILLINGER whose telephone number is (571)272-6652. The examiner can normally be reached on Mon. thru Fri. 9 a.m. to 4 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Isabella can be reached on (571) 272-4749. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/A. S./

Examiner, Art Unit 3774

***/DAVID ISABELLA/***

***Supervisory Patent Examiner, Art Unit 3774***